

REMARKS

Reconsideration and allowance of the above referenced application are respectfully requested. After entry of this Amendment, claims 1-20 will be pending in the case.

Claims 1, 2, 9, and 10 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over the prior art admitted by Applicant on page 2, lines 14-23, in view of Shirasawa (Japanese Patent 57-99615). Claims 1 and 9 have been amended, thereby obviating the rejection thereto, as well as to claims 2 and 10 which respectively depend therefrom.

It is respectfully submitted that the cited references do not disclose or suggest claims 1 or 9 as amended. Claim 1 defines a TFT substrate and a counter substrate where a side edge of the TFT substrate and a side edge of the counter substrate are substantially aligned. A nonconductive or weakly conductive material is applied or adhesively bonded to the side edge of the TFT substrate and to the side edge of the counter substrate. Thus, the nonconductive material is applied to both side edges, as depicted in FIG. 1 and FIG. 9.

As the Examiner admits, the admitted prior art on page 2, lines 14-23 of the specification does not teach applying a nonconductive or weakly conductive material to both side edges. (See FIG. 4 and FIG. 6.) Shirasawa teaches applying a heat melted hydrophobic organic material 9, such as paraffin wax, to a peripheral part of a sealant 7 to coat the sealant. (See Shirasawa, FIGURE and translated abstract.) Shirasawa states

that the purpose of the invention is to prevent the deterioration of an organic sealant due to the penetration of water.

(Shirasawa, translated abstract.) The Examiner contends that it would have been obvious "to coat a nonconductive hydrophobic organic material over the seal and cut surface of the substrates to prevent deterioration of the seal in the admitted prior art." (Office Action, page 2.)

It is respectfully submitted that Shirasawa does not disclose or suggest applying a nonconductive material to a side edges of a TFT substrate and to a side edge of a counter substrate. The figure of Shirasawa shows that the organic material 9 extends from a substrate 1 to a transparent electrode layer 4, covering the sealant 7. The organic material 9 does not contact a second substrate 2 at all in the figure.

The stated purpose in Shirasawa is to prevent deterioration of the sealant 7. The sealant 7 is not exposed. The sealant 7 is covered on all sides in the figure by the first substrate 1, the organic material 9, the transparent electrode layer 4, and a liquid crystal layer 8. Thus, there is no need to extend the organic material 9 to the second substrate 2 in Shirasawa. Accordingly, Shirasawa does not suggest applying a nonconductive material to a side edge of a TFT substrate and to a side edge of a counter substrate.

Furthermore, it would not be obvious to apply the teaching of Shirasawa to the problem addressed by claim 1 because Shirasawa addresses a different problem. As discussed above, the

purpose of Shirasawa is to prevent the deterioration of an organic sealant due to the penetration of water. Claim 1 addresses protecting pixel TFTs from static charge by applying the nonconductive material to both the side edge of the TFT substrate and the side edge of the counter substrate, forming a nonconductive layer across both substrates. (See Specification, page 4, lines 27-31, page 5, lines 1-12.) Shirasawa does not address protecting pixel TFTs from static charge and so it would not be obvious to apply the teaching of Shirasawa to the problem addressed by claim 1.

Accordingly, claim 1 contains limitations which are not disclosed or suggested by the cited prior art. Thus, claim 1, as well as claims 2-8 which depend therefrom, are in condition for allowance. Claim 9 contains limitations similar to claim 1 and so for similar reasons claim 9, as well as claims 10-16 which depend therefrom, are in condition for allowance.

New claim 17 contains limitations similar to claim 1. A nonconductive or weakly conductive material is applied or adhesively bonded to a side edge of a counter substrate and a side edge of a TFT substrate, where the material is provided outside a control circuit or outside a bus line. Thus, the nonconductive material is applied to the side edge of the TFT substrate and the side edge of the counter substrate. Accordingly, claim 17 is in condition for allowance for similar reasons to those discussed with respect to claim 1.

New claims 18-20 contain limitations similar to claim 1 and claim 17. Accordingly, claims 18-20 are in condition for allowance for similar reasons to those discussed above.

Claims 3-8 and 11-16 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over the prior art admitted by Applicant on page 2, lines 14-23, in view of Shirasawa as applied to claims 1, 2, 9, and 10 above, and further in view of Spruijt et al. (U.S. Pat. No. 4,394,067).

Spruijt does not disclose or suggest applying a nonconductive or weakly conductive material to a side edge of a counter substrate and a side edge of a TFT substrate. Thus, Spruijt does not disclose or suggest the limitations of claims 1, 9, and 17-20.

Accordingly, the cited references do not disclose or suggest, alone or in combination, claims 1, 9, or 17-20. Thus, claims 1 and 9 are in condition for allowance and so claims 3-8 and 11-16 which respectively depend therefrom are also in condition for allowance.


In view of the above amendments and remarks, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

If there are any other charges, or any credits, please apply them to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

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